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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,345	01/27/2004	Steven Bress		1052
7590	02/15/2006		EXAMINER	
Steven Bress			IWASHKO, LEV	
7851-C Beechcraft Avenue				
Gaithersburg, MD 20879			ART UNIT	PAPER NUMBER
			2186	
				DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/765,345	BRESS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lev I. Iwashko	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 27 January 2004.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 1-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-15 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 27 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6 all recite “the Identify Device Packet”. However, none of the previous claims defined an identity Device Packet. There is therefore insufficient antecedent basis for this limitation in the claims.

Claims 7-8 reference an “Enable/Disable Address Offset Mode”, that was not defined in any of the previous claims. There is therefore insufficient antecedent basis for this limitation in the claims.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 9-10, 13 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by East et al. (US Patent 6,651,077 B1).

Claim 1. A restoring device comprising: *(Title – Declares a restoring device)*

- an interface for connecting to a storage device; *(Column 7, lines 3-10 – Declare that there is an interface that connects to the hard disk drive)*
- and memory to store critical data from the storage device; *(Column 6, lines 45-50 – State the following: “Computer storage media includes volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage information such as computer readable instructions, data structures, program modules, or other data”)*
- and a processor coupled to the interface and memory, the processor issuing queries to the storage device's controller, *(Column 4, lines 9-14 – State the following: “One particular implementation of the present invention is directed to a computer-implemented method for restoring information to an electronic database from a sequence of at least one backup set. A history of one or more backup operations performed on the electronic database, which is associated with a recovery fork, is maintained”)*
- the processor storing all or part of the response in the memory, upon command the processor issues commands to restore the storage device's controller to its original state. *(Column 6, lines 15-50 – State how the processor stores the data in the memory, and then restores the system bus 123)*

Claim 9. The restoring device of claim 1, wherein the memory is removable, such as a compact Flash card. *(Column 6, lines 45-50 – State the following: “Computer storage media includes volatile and nonvolatile, removable and non-removable media implemented in any method or technology for*

*storage information such as computer readable instructions, data structures, program modules, or other data”)*

Claim 10. The restoring device of claim 1, wherein the memory is non-volatile memory. (*Column 6, lines 45-50 – State the following: “Computer storage media includes volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage information such as computer readable instructions, data structures, program modules, or other data”*)

Claim 13. A restoring device comprising: (*Title – Declares a restoring device*)

- means for interfacing with a storage device; (*Column 7, lines 11-15 – The hard disk drive 127, magnetic disk drive 128, and optical disk drive 130 are connected to system bus 123 by a hard-disk drive interface 132, a magnetic-disk drive interface 133, and an optical-drive interface 134, respectively*)
- means for storing information from the storage device's controller; (*Column 6, lines 30-31 – State the following: “System bus 123 may be any of several types, including a memory bus or memory controller”*)
- means for querying a storage device's controller; (*Column 4, lines 9-14 – State the following: “One particular implementation of the present invention is directed to a computer-implemented method for restoring information to an electronic database from a sequence of at least one backup set. A history of one or more backup operations performed on the electronic database, which is associated with a recovery fork, is maintained”*)
- means for restoring the storage device's controller to its original state. (*Column 6, lines 15-50 – State how the processor stores the data in the memory, and then restores the system bus 123*)

Claim 15. The restoring device of 13, further comprising: means to communicate information to a user. (*Column 7, lines 36-43 – Declare that system bus 123 is connected to a video output or other output devices*)

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 14 are rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claims 1 and 13 above, further in view of Vogt et al. (US Patent 6,681,304).

East teaches the limitations of claims 1 and 13 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to hidden storage.

East fails to teach claims 2 and 14, which respectively state "The restoring device of claim 1, wherein after querying the storage device's controller the processor issues commands to enable a host to read hidden data from the storage device", and "The restoring device of 13, further comprising: means to enable a host to read data from hidden areas on a storage device." However, Vogt states the following: "User data is read from system hidden storage 406 or 411 directly by the host system" (Column 5, lines 18-20). Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Vogt's "Method and Device for Providing Hidden Storage in Non-Volatile Memory" to include hidden storage read capability so that the system would be more precise and thorough.

6. Claim 3 is rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claim 1 above, further in view of Adams et al. (US Patent 6,195,732).

East teaches the limitations of claim 1 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to IDE.

East fails to teach claim 3, which states "The restoring device of claim 1, wherein the interface is an integrated device electronics (IDE) interface for a disk drive." However, Adams discloses that "Although in the example embodiment described herein a SCSI interface is described, other interfaces such as IDE/ATA and 1394 (Firewire) can also be used" (Column 4, lines 59-62). Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Adams' "Storage Device Capacity Management" to include an integrated device electronics (IDE) interface for a disk drive, so that the system would run more efficiently.

7. Claims 4-6 are rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claims 1 and 3 above, further in view of Adams et al. (US Patent 6,195,732).

East teaches the limitations of claims 1 and 3 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to identifying, changing, or restoring disk-drives or their sizes.

East fails to teach claims 4-6, which respectively state "The restoring device of claim 3, wherein the processor issues commands to retrieve the storage device's unique identification number and reported drive size from the Identify Device data packet and stores this information in the memory", "The restoring device of claim 3, wherein the processor issues further

commands to the storage device to obtain data to allow the processor to analyze the full size of the storage device and subsequently issue commands to change the drive size reported by the storage device's controller in the Identify Device Packet, to enable a host to read data from the entire drive", and "The restoring device of claim 3, wherein the processor, upon command, issues commands to restore the drive size reported by the storage device's controller in the Identify Device Packet, to its original state." However, Adams states the following: "Referring back to FIG. 2, managing the available capacity of the disk drive 20 in response to receipt of a request in the local host system 15 for changing the capacity of the disk drive 20 (step 120), includes the steps of: obtaining verification information from said disk drive 20 including said disk identifying information 75 (step 125); and searching said list 100 to find an entry 110 including device identification information 115 matching the disk information 75 obtained from the disk drive 20 to authorize said change (step 130). If a match is found (step 135), then: generating a change command for directing the disk drive 20 to change said available capacity (step 140); sending the change command to the disk drive 20 (step 145); and the disk drive 20 executing said change command by steps including changing the size of said open section 85 (step 150). Otherwise, if a match is not found in step 135, the size of the open section 85 is not changed (step 155)" (Column 5, lines 15-31). Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Adams' "Storage Device Capacity Management" to identifying, changing, and restoring disk-drives or their sizes so that the system would be more precise and user-friendly.

8. Claim 7 is rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claims 1 and 3 above, further in view of Colegrove et al. (US Patent 6,415,383 B1).

East teaches the limitations of claims 1 and 3 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to switching to Enable/Disable Address Offset Mode.

East fails to teach claim 7, which states "The restoring device of claim 3, wherein the processor, upon command, issues a command to switch Enable/Disable Address Offset Mode."

However, Colegrove discloses that "the enable AOM command is issued" (Column 5, lines 9-10). Colegrove further states that "To return the computer system 100 to operation under the primary or first OS, a Disable AOM command removes the offset" (Column 4, lines 47-49).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Colegrove's "Address Offset Feature for a Hard Disk Drive" to include switching to Enable/Disable Address Offset Mode, so that the system would retain information more easily and therefore run more efficiently.

9. Claim 8 is rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claims 1 and 3 above, further in view of Colegrove et al. (US Patent 6,415,383 B1).

East teaches the limitations of claims 1 and 3 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to restoring to Enable/Disable Address Offset Mode's original state.

East fails to teach claim 8, which states "The restoring device of claim 3, wherein the processor, upon command, issues a command to restore the Enable/Disable Address Offset Mode to its original state." However, Colegrove discloses that "Any of these commands result in a

remove offset step 160 in which the address offset mode is disabled causing the addresses of all the locations of the address space 102 to revert to their original values" (Column 5, lines 43-46). Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Colegrove's "Address Offset Feature for a Hard Disk Drive" to include restoring to Enable/Disable Address Offset Mode to its original state, so that information would be salvaged thereby allowing the system to be more accurate and efficient.

10. Claim 11 is rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claim 1 above, further in view of Brody et al. (US Patent 5,481,647).

East teaches the limitations of claim 1 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to current state notification.

East fails to teach claim 12, which states "The restoring device of claim 1, further comprising: an interface to communicate to a user the current state of the storage device." However, Brody discloses that "The user interface tells the user what the state of the expert system is at any particular time" (Column 1, lines 19-21). Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Brody's "User Adaptable Expert System" to include current state notification to make the system more accurate and user-friendly.

11. Claim 12 is rejected under 35 U.S.C.103(a) as being unpatentable over East et al. as applied to claim 1 above, further in view of Vogt et al. (US Patent 6,681,304).

East teaches the limitations of claim 1 for the reasons above.

East's invention differs from the claimed invention in that there is no specific reference to password protection notification.

East fails to teach claim 12, which states "The restoring device of claim 1, further comprising: an interface to communicate to a user that the storage device is password protected." However, Vogt discloses that "In one embodiment, the Hidden storage system also provides password protected system administrator access. A system administrator, after entering a valid system password, can reset the contents of hidden storage 120, erasing its contents" (Column 8, lines 65-67 and Column 9, lines 1-2). Therefore, it would have been obvious to one of ordinary skill in the art to combine the "Backup and Restoration of Data in an Electronic Database" of East and Vogt's "Method and Device for Providing Hidden Storage in Non-Volatile Memory" to include password protection notification to make the system more secure and user-friendly.

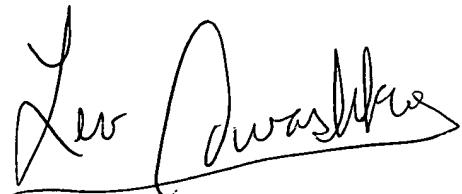
*Conclusion*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lev I. Iwashko whose telephone number is (571)272-1658. The examiner can normally be reached on M-F (alternating Fridays), from 8-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (571)272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lev Iwashko



**MATTHEW D. ANDERSON**  
**PRIMARY EXAMINER**